

JDISS SERVER/CLIENT SEGMENTS (Ver 2.0) ABSTRACT

29 July 1996

Prepared by: JDISS PMO

PURPOSE:

JDISS Version 2.0 provides the intelligence applications segment for GCCS Version 2.0 and 2.1. Currently, JDISS is delivered as a server / client pair of segments, built for the SUN SPARC 20 platform running the Solaris 2.3 OS. Two additional segments are available as JDISS Corporate Services (or plug-in) segments - JDISS IPA Client and JDISS Video. Separate abstracts are available which discuss these in more detail.

JDISS Server Segment: The JDISS Server segment built for (and fielded with) GCCS contains the same core software found in the stand-alone implementation of JDISS, i.e. the JDISS 2.0 Workstation. This guarantees interoperability with "regular" JDISS and other systems that have embedded JDISS 2.0 functionality, e.g. JMCIS 2.2. The GCCS JDISS segment does not presently support all of the Corporate Services in the stand-alone JDISS 2.0 Workstation. Expansion of Corporate Services for GCCS will be a prime focus of the JDISS program upon migration to the Defense Information Infrastructure (DII).

JDISS Client Segment: The JDISS Client segment mounts and executes the software contained in the JDISS Server segment. It cannot function independently and must be able to communicate with its JDISS server counterpart at Ethernet speeds (e.g. 10 Mbps). This is required to properly support Network File System (NFS) mounts of the software on the server. The JDISS Client provides an efficient way to distribute JDISS functionality within a Local Area Network (LAN) environment with a minimum of disk space consumption.

JDISS Functionality in GCCS:

JDISS software consists of integrated COTS and GOTS applications that roughly serve four functional areas: imagery tools (manipulation, dissemination and publishing), remote access to intelligence databases (through client programs and terminal emulation), analyst-to-analyst communications (chatter, alerts, pings, e-mail), and office automation (word processing, map graphics, presentation graphics, spreadsheets, etc).

JDISS can be used with virtually any Wide Area Network (WAN) comms pipeline, from low-speed (9.6 KB recommended minimum) to high-speed T1 links. The classification of a JDISS software suite depends on the classification of its workstation and the network it is connected to. JDISS itself is unclassified, but may be used over SCI (JWICS), GENSER (SIPRNET), or unclassified comms lines. The JDISS segment on a SIPRNET-based GCCS can only communicate with other SIPRNET JDISS suites and remote databases.

Current GCCS architecture accesses JDISS via an icon on the GCCS main desktop. When this icon is selected, the JDISS main desktop appears as a window on GCCS. A GCCS operator or intel analyst achieves full JDISS functionality by working within this window on GCCS. The major strength of this approach is that by preserving the "look and feel" of the stand-alone JDISS user desktop, the JDISS segment on GCCS brings with it a broad base of training and user support in every CINC theater worldwide.

EXAMPLE APPLICATION:

As the standard deployable intelligence workstation, JDISS is used worldwide to guarantee interoperability in the intelligence domain. JDISS provides the warfighter access to theatre and national sources of intelligence and facilitates collaboration among and between decision makers and intelligence analysts. The addition of JDISS to GCCS provides an interoperable window with these deployed JDISS users and to the theatre and national intelligence communities.

JDISS can be used by any site that has an intelligence requirement. A typical use is to link to an imagery server, download image files, and display/manipulate them using the imagery analysis tools in JDISS. Imagery data may need to be fused with data from an intel database to refine an assessment. The user may then need to establish a chatter session with another analyst (who might be forward deployed using a stand-alone JDISS) to collaborate analysis. The user could annotate and send a copy of the image file if necessary, using one of the JDISS comms tools, e.g. Sendfile or XFTP. All of the aforementioned tasks are supported by tools or interfaces contained in the JDISS server/client segments.

PRODUCT QUALIFICATION:

JDISS was accepted as the intelligence segment of GCCS 2.0 and continues to evolve as GCCS evolves. JDISS, as it presently exists in GCCS 2.1/2.2, has been engineered to be more COE compliant through removal of functions which overlapped with the COE. As GCCS and JDISS migrate to the DII, JDISS will offer more Corporate Services segments and will in effect become a family of intelligence segments instead of the present client/server pair.

IMPLEMENTATION ISSUES:

JDISS operates with the following configuration and memory:

	JDISS Server	JDISS Client
Version:	2.0.3	2.0.4
CPU:	Sun Sparc	Sun Sparc
O/S:	Solaris 2.3	Solaris 2.3
Disk Space:	400MB	30MB
Memory:	64MB Recommended	64MB Recommended

PRODUCT CONSTRAINTS AND LIMITATIONS:

None.

DEPENDENCIES:

GCCS APPLIX Segment

GCCS NETSCAPE Segment

JDISS CLIENT depends on JDISS SERVER (in same LAN, not same workstation)

REQUIRED COTS LICENSES:

After installation of the JDISS Server segment, a JDISS license must be installed to activate the COTS applications listed below. Installation of separate licenses for each product is not required and will not work as substitutes for a JDISS license. All of the JDISS COTS products are available on the DIA (Defense Intelligence Agency) SASS contract. The JDISS PMO issues JDISS licenses based on proof of purchase of these COTS products:

X.DESKTOP - Provides desktop manager for JDISS 2.0 software. Allows all files and programs to be represented and controlled by recognizable icons. (IXI Ltd.)

DESKTOP CHATTER - Enables informal, real-time "chatter" comms between users at the same or different sites. Users can exchange multiple line messages back and forth, similar to the chat sessions that can be opened on services such as America Online, Prodigy, etc. Users can also open up conference sessions with multiple sites. (Paragon Imaging Inc.)

TN3270 - Telnet style terminal emulator which permits connectivity and data exchange between Unix workstations and IBM mainframes. Used mainly to access large shore-based databases. (Open Connect Systems Inc.)

SYNCHRONIZE - Provides a calendar and office scheduling system for individuals and groups to organized and coordinate daily activities. (Crosswind Technologies Inc.)

WORLDVIEW - Allows users to browse and search Interleaf documents. (Interleaf)

ELT 2000 - Imagery Support. Allows users to view and manipulate various types of color and grey-scale image files. Supports TACO2 communications protocol and works with a variety of scanners, video frame grabbers, and printers. Must also buy ELT 1000 when procuring off DIA SASS contract. Must also buy IMAGEXCHANGE (PIX) for high-performance (and color) printer/scanner support and to provide full image import/export capabilities. (Paragon Imaging Inc.)

ELT 1000 - Imagery Support. Provides basic grey-scale image viewing. Required purchase with ELT 2000 when buying off DIA SASS contract. (Paragon Imaging Inc.)

IMAGEXCHANGE (PIX) - Provides device drivers and support software necessary to interface ELT 2000 with a wide range of high performance (and color) printers and

scanners. Also provides conversion programs to allow users to import and export images in a wide variety of formats (NITF 1.1, NITF 2.0, TIFF (v5 & v6), TARGA (1 & 2), EPS, SunRaster, AVS, XWD, PNM, PCL, PostScript levels 1 & 2, etc.) One copy of IMAGEEXCHANGE (PIX) per server is usually adequate. (Paragon Imaging Inc.)

LEGAL RESTRICTIONS:

May not be released to any foreign countries on the State Department prohibited list.

EXECUTIVE AGENT:

DODIIS, delegated to Director, Office of Naval Intelligence